

Abstract

A system, method, and article of manufacture are disclosed wherein a plurality of objects, components, programming interfaces and user interfaces are defined to facilitate a universally applicable editing, testing and execution system for a plurality of configurable data processing systems and the edit-time data that drives them.

The system is comprised of a *meta-model* that provides for the specification of formations of edit-time data and constraints thereof.

The system is further comprised of *meta-model data* that specifies the allowable formations of edit-time data.

The system is further comprised of a user interface for displaying edit-time data and initiating edit actions to add, modify, and delete portions of edit-time data.

The system is further comprised of coded logic steps that interpret *meta-model data* together with edit-time data to cause user interface to visually represent edit-time data to the user in a specified formation. Said coded logic steps interpret user initiated edit actions with *meta-model data* and edit-time data to enforce that only valid edit actions are permitted to complete and only valid formations of edit-time data can be created.

The system is comprised in such a way as to not require source code changes to support varied and unanticipated edit-time data models resulting from different instantiations of the *meta-model* into *meta-model data*.

A preferred embodiment is directed at supporting a plurality of software engines that provide desired runtime behaviors and results by processing conforming static edit-time data together with dynamic run-time data.